

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Michael Rumer, Jack Griswold, Tom Dorsh, Michael Kwok Leung Ng,

David E. Reedy, Paul D. Healey, Michal Danek and Reed W. Rosenberg

Assignee:

Novellus Corporation

Title:

PVD Deposition Process For Enhanced Properties of Metal Films

Serial No.:

09/675,627

Filing Date:

September 29, 2000

Examiner:

P. Perkins

Group Art Unit:

2822

Docket No.:

M-8570 US

San Jose, California May 30, 2002

COMMISSIONER FOR PATENTS Washington, D. C. 20231

RESPONSE TO OFFICE ACTION

RECEIVEL IUN 11 2002 C 2800 MAIL ROOM

Dear Sir:

This is in response to the Office Action with a mailing date of January 31, 2002. Please amend the above-referenced application as follows. A one-month extension of time accompanies this Response, allowing the Applicants until May 31, 2002 to respond.

06/07/2002 AOSMAN1 01 FC:102 00000103 192386 09675627

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IN THE CLAIMS

The following is a clean set of the entire set of claims. In accordance with 37 C.F.R. § 1.121(c)(1)(ii), a marked-up version of the amended claims is included in Appendix A.

1. A method of forming an oriented metal layer on a substrate, the method comprising:

placing the substrate in a deposition chamber comprising a source of metal;

depositing the metal layer onto the substrate by physical vapor deposition of the source of metal under conditions wherein the atmosphere in the deposition chamber comprises hydrogen and wherein the hydrogen is activated, whereby the metal layer has a preferred crystal orientation.

LAW OFFICES OF SKJERVEN MORRILL LLF

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and

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Applicants: Re:

Michael Rumer, Jack Griswold, Tom Dorsh, Michael Kwok

Leung Ng, David E. Reedy, Paul D. Healey, Michal Danek and

Reed W. Rosenberg

Assignee:

Novellus Systems, Inc.

Title:

PVD Deposition Process For Enhanced Properties of Metal Films

Serial No .: Examiner:

09/675,627

Perkins, P.

September 29, 2000 Filed:

Docket No.:

M-8570 US

Group Art Unit: 2822

Dear Sir:

Transmitted herewith are the following documents in the above-identified application:

(1) Return Receipt Postcard;

- (2) This Transmittal Letter (in duplicate);
- (3) Response to Office Action (12 pages); and
- (4) Petition for Extension of Time (1 page).

No additional fee is required. The fee has been calculated as shown below:

CLAIMS AS AMENDED

		Claims Remaining		Highest No. Previously Paid For		Present Extra_		Rate		Additional Fee
		After Amendment 22	Minus	22	=	0	x	\$18.00	\$	0.00
Total Claims		22								
Indep	oendent	4	Minus	3	=	1	X	\$84.00	\$ 	84.00
_Clair	- + c · ci' - f or more multiple							\$		
	fee of for the first filing of one of more manufic dependent claims per application									110.00
$\overline{\square}$	Fee for l	Request for Extension	of Time (or	ne month)						
Total additional fee for this Amendment:								\$	<u>194.00</u>	
Conditional Petition for Extension of Time: If an extension of time is required for timely filing of the enclosed document(s) after all papers filed with this transmittal have been considered, an extension of time is hereby requested.										
\boxtimes	Please charge our Deposit Account No. 19-2386 in the amount of									<u>194.00</u>
	Also, charge any additional fees required and credit any overpayment to our Deposit									
Δ	Account No. 19-2386. Total:							\$	194.00	

EXPRESS MAIL LABEL NO:

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Respectfully submitted,

Norman R. Klivans Attorney for Applicants Reg. No. 33,003

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